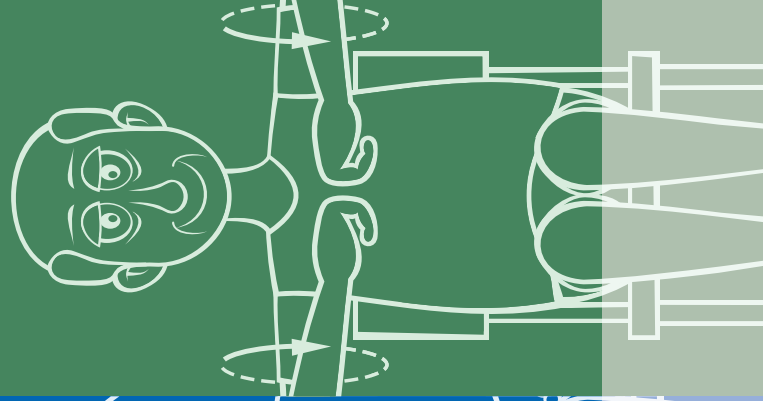
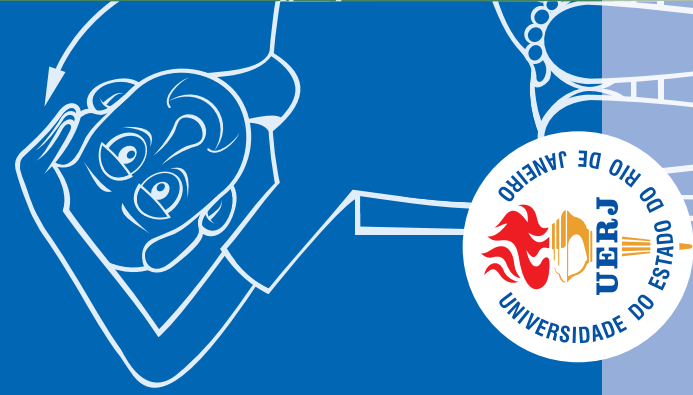


Department of Pulmonary Medicine



Pulmonary Rehabilitation Manual – Home-based –

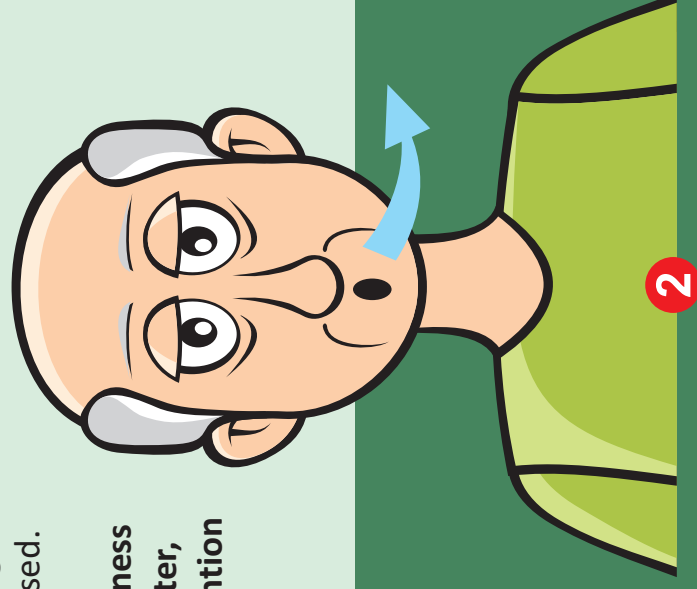
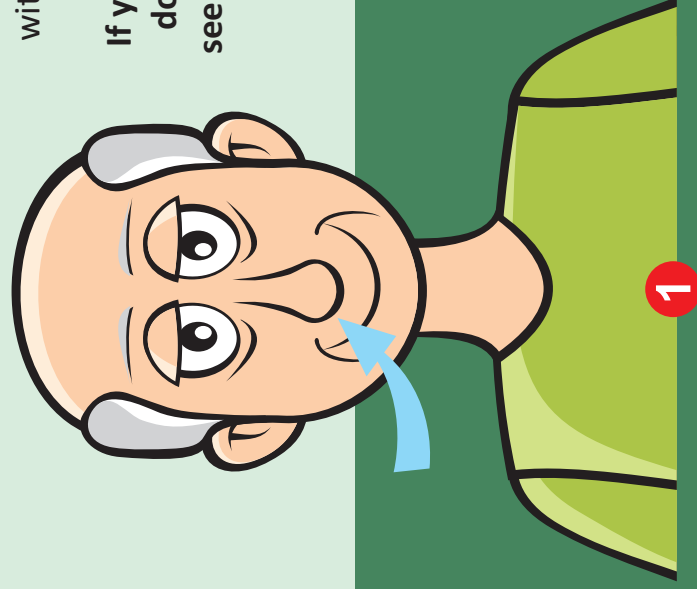
Department of Pulmonary Medicine





If you're feeling short of breath, take a look at the table on the previous page and rate your level of breathlessness.

Now perform this technique:
breathe in deeply through your nose,
and breathe out slowly through the mouth
with your lips pursed.



**If your breathlessness
does not get better,
seek medical attention
urgently.**

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Physiotherapy Director of the Laboratory
of Pulmonary Rehabilitation. UERJ

Yves Raphael de Souza, PT, MSc
Researcher at the Laboratory of Pulmonary Rehabilitation. UERJ

Dear Sir/Madam,

It probably all started around 1895 when an American doctor (Charles Denison, Denver, Colorado) realized the importance of physical activity for the recovery of patients with chronic lung diseases.

He then went on to write a book on the subject "Exercise and Food for Pulmonary Invalids".

He, himself, suffered from chronic lung disease and was hospitalized in a sanatorium. He had an old habit of exercising through gymnastics and jogging. Despite being hospitalized he kept up his exercises and realized that he felt better than the other patients and was recovering faster.

Over the past century, researchers and health professionals have improved their knowledge about the importance of exercise improving the quality of life for patients with chronic lung diseases.

Respiratory Rehabilitation centered around physical activities is an undeniable reality today.

We intend this manual to help patients achieve this treatment in their own homes, complementing the medical treatments prescribed by their pulmonologist.

Following the guidelines laid out here is fundamental to the success of our endeavor.

We hope you will have no doubts or queries, but should any arise, we are always ready to help.

Very best wishes and "go for it!"

Arnaldo José Noronha Filho, MID
Medical Director, Laboratory of Pulmonary Rehabilitation,
State University of Rio de Janeiro.

Now repeat the BLUE SERIES and you're done.

Before the finishing, answer the following question:

At the moment you felt most tired, how would you rate your feeling of breathlessness, according to the table?

Write down this number on the control sheet. And that's it, you're done. See you tomorrow.

BORG SCALE

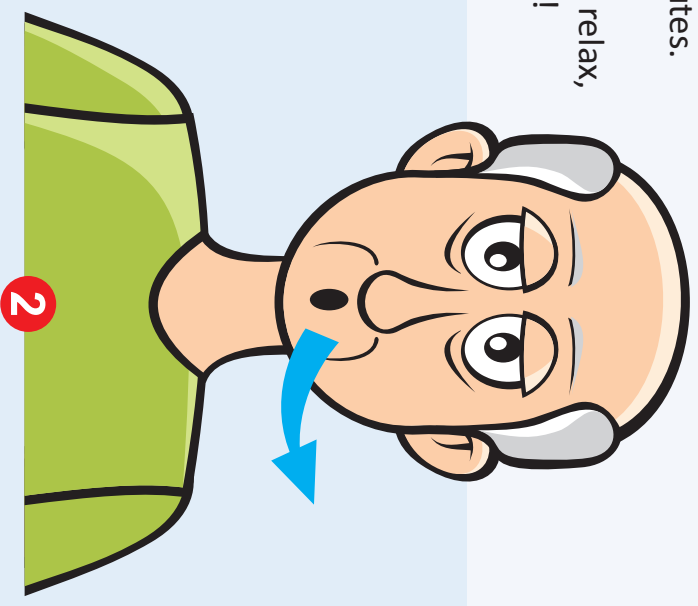
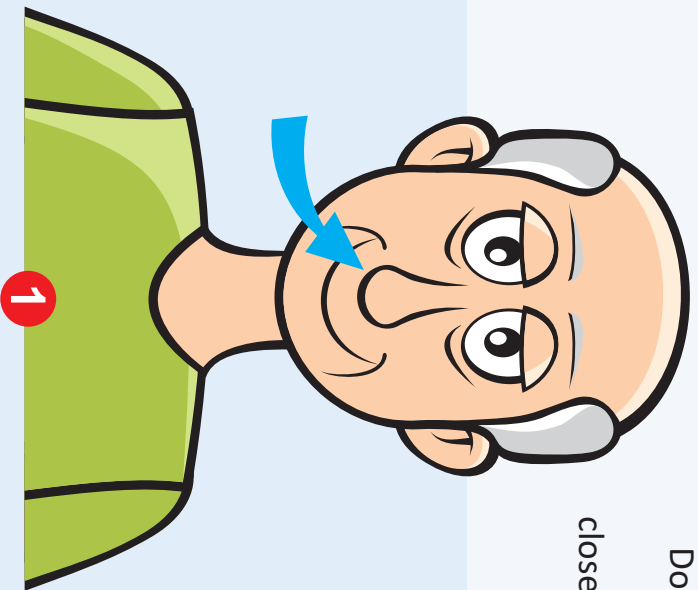
0	nothing at all
0,5	very, very slight
1	very slight
2	slight (light)
3	moderate
4	somewhat severe
5	severe (heavy)
6	
7	very severe
8	
9	very, very severe
10	maximal

stretching, preparation and relaxation

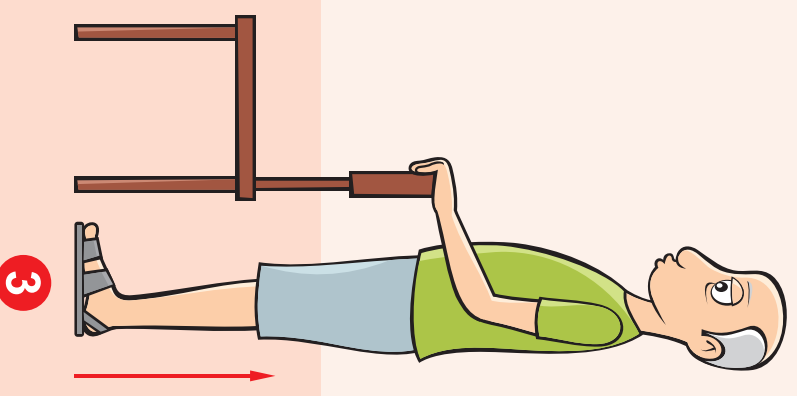
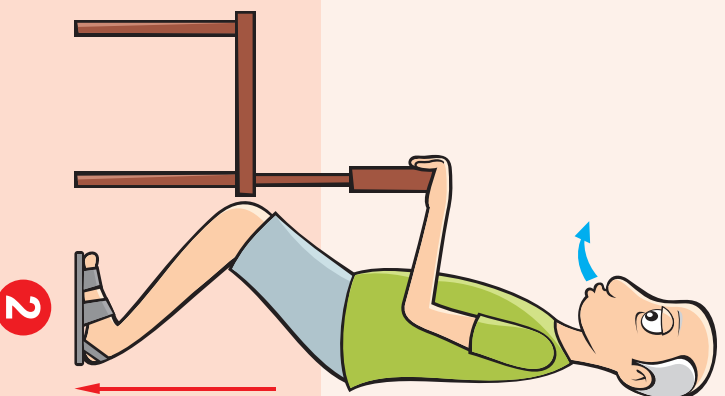
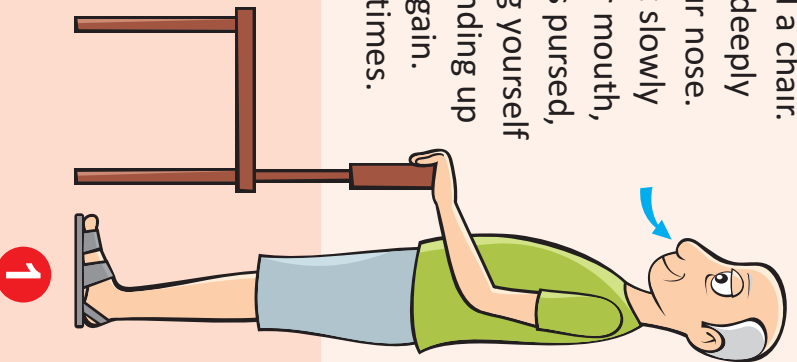
Breathe in slowly through your nose and then breathe out slowly through your mouth, with your lips pursed as if using a straw.

Do this for 5 minutes.

If you can, close your eyes and relax, that's the goal!



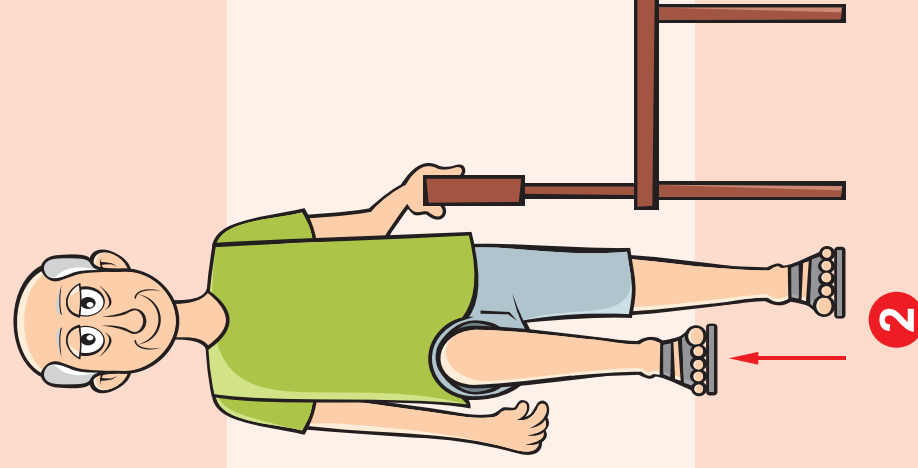
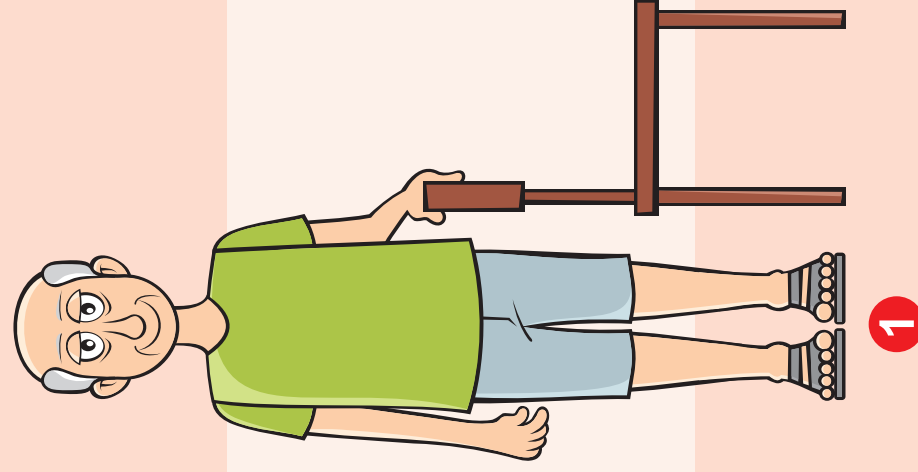
Stand behind a chair.
Breathe in deeply through your nose.
Breathe out slowly through your mouth, with your lips pursed, while lowering yourself and then standing up straight again.
Repeat 20 times.



leg exercises

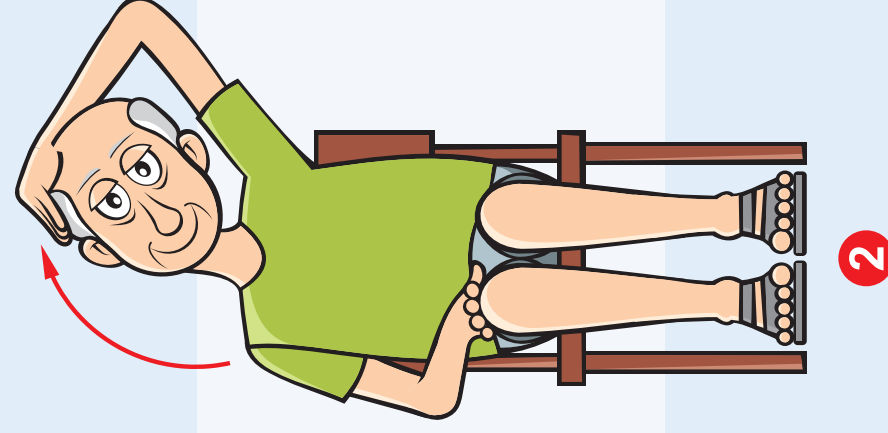
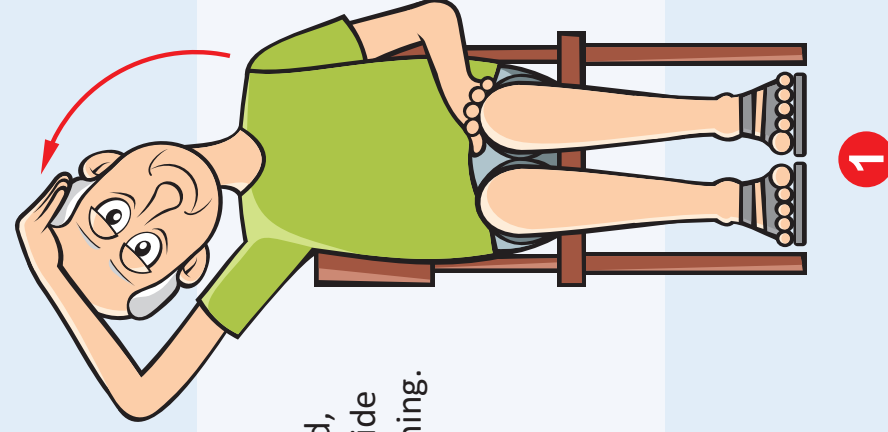
leg exercises

While standing up and holding on to a chair, lift your knee as high as you can and then lower it. Do this 20 times and then repeat with the other leg.

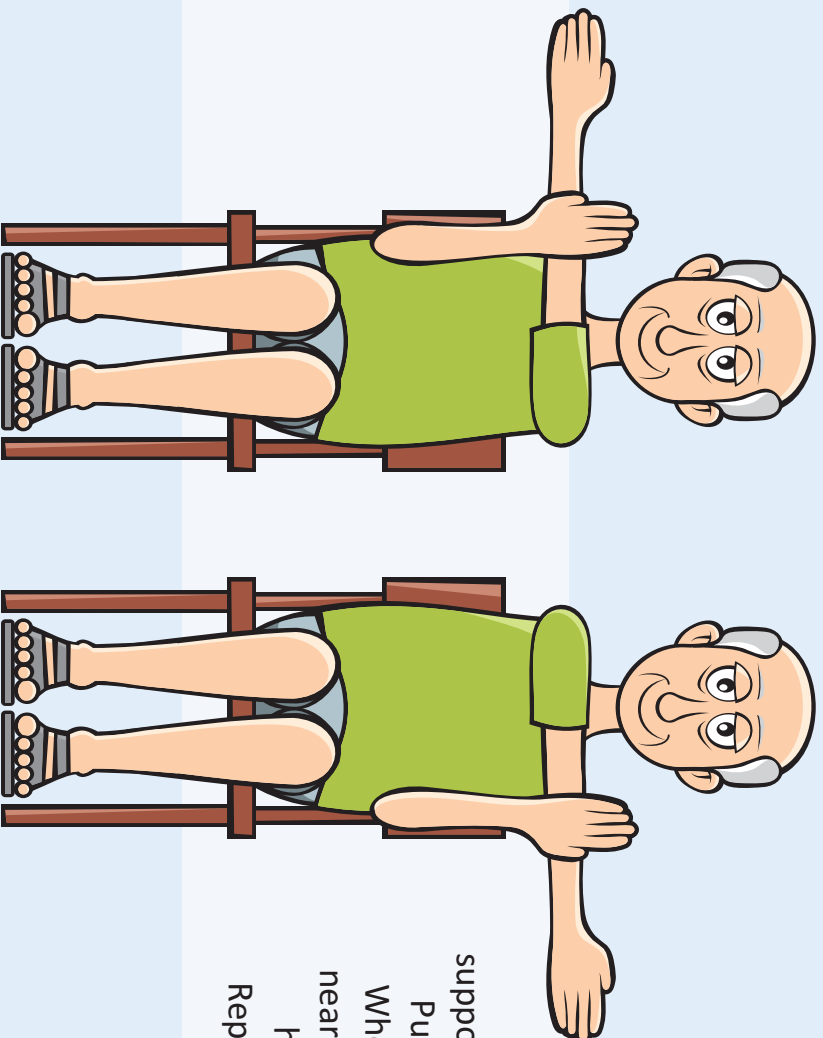


Lift one of your arms over your head and with your hand, pull your head slightly to one side to feel your neck muscles stretching.

When you feel the stretch, count to 20 very slowly. Repeat with the other arm on the other side.

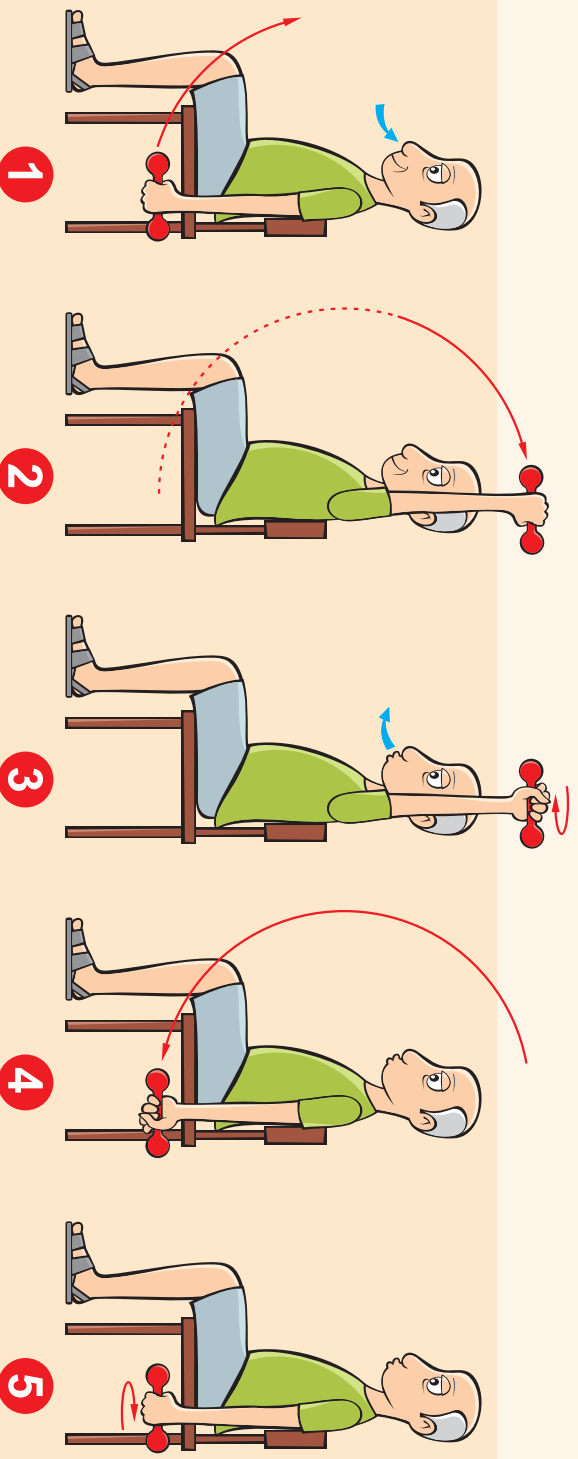


stretching, preparation and relaxation



While sitting down,
support your arm at the elbow.
Pull it toward your chest.
When you feel the muscles
near the shoulder stretching,
hold and count to 20.
Repeat with the other arm.

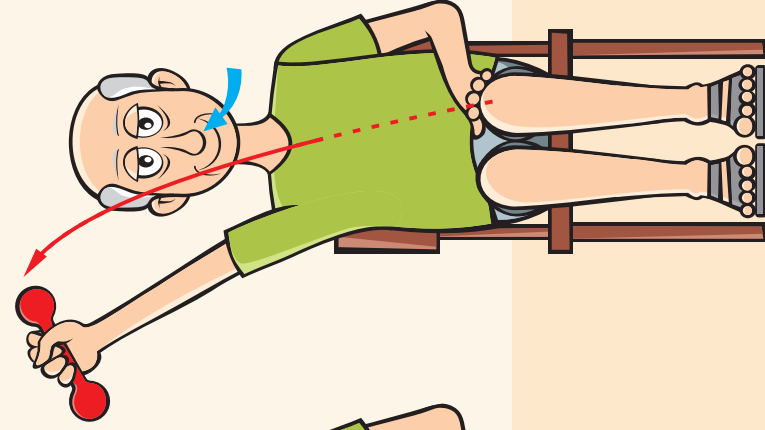
While sitting down, hold the dumbbell that your Physiotherapist or Respiratory Therapist recommends with your right hand. Breathe in through your nose while raising your extended arm by the side of your body. When your arm is as high as you can raise it, turn the dumbbell to face down and lower your arm keeping it straight. At the same time, breathe out slowly through your mouth, while pursing your lips. Do this 20 times. Then repeat with the other arm.



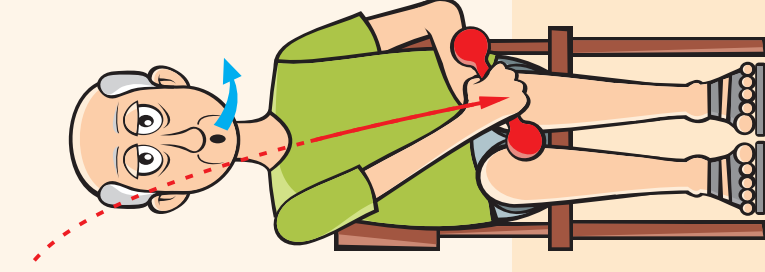
arm exercises



1



2



3

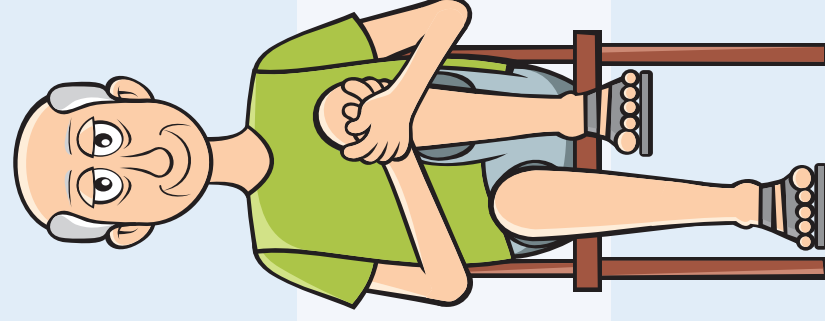
While sitting down, hold the dumbbell that your Physiotherapist or Respiratory Therapist recommends with your right hand and support it on your left thigh.

Raise your arm diagonally and then lower it back to your thigh 20 times. Repeat with the other arm.

While sitting down, grab your knee and pull it toward your belly. When you feel you have reached the maximum, hold and count to 20 slowly. Repeat with the other leg.



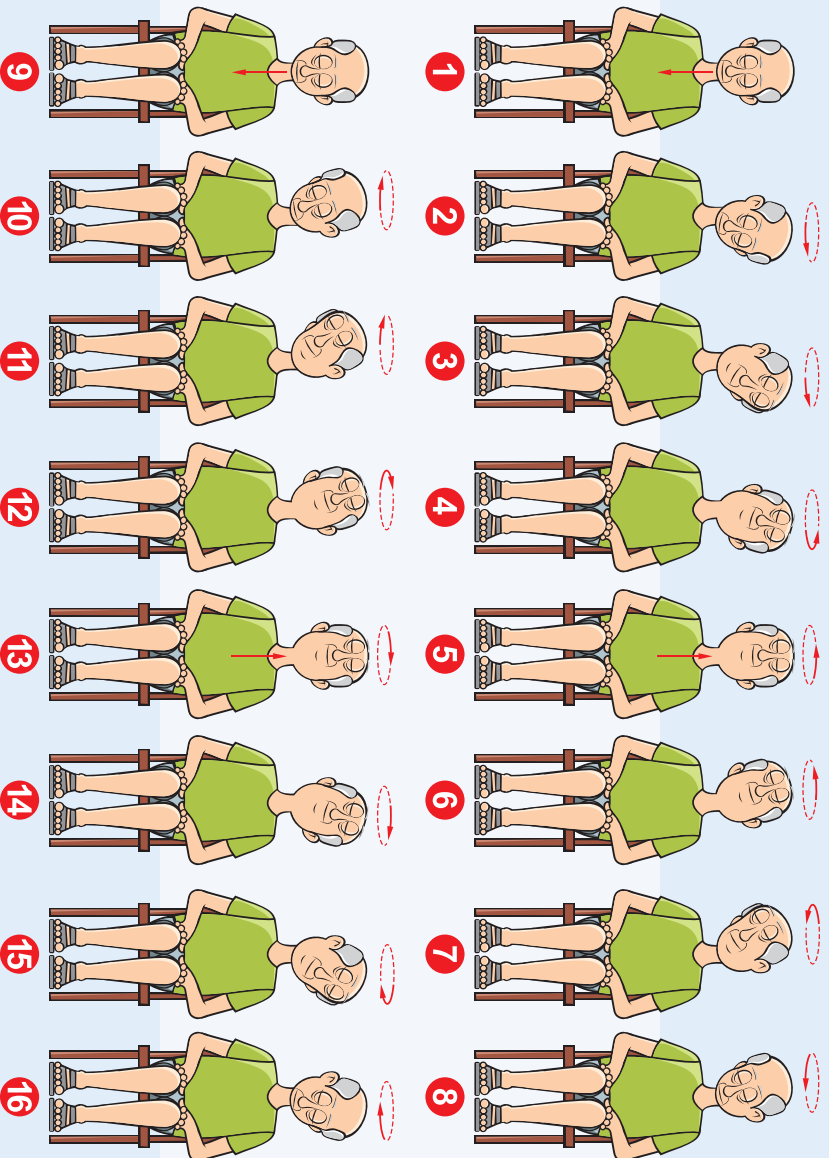
1



2

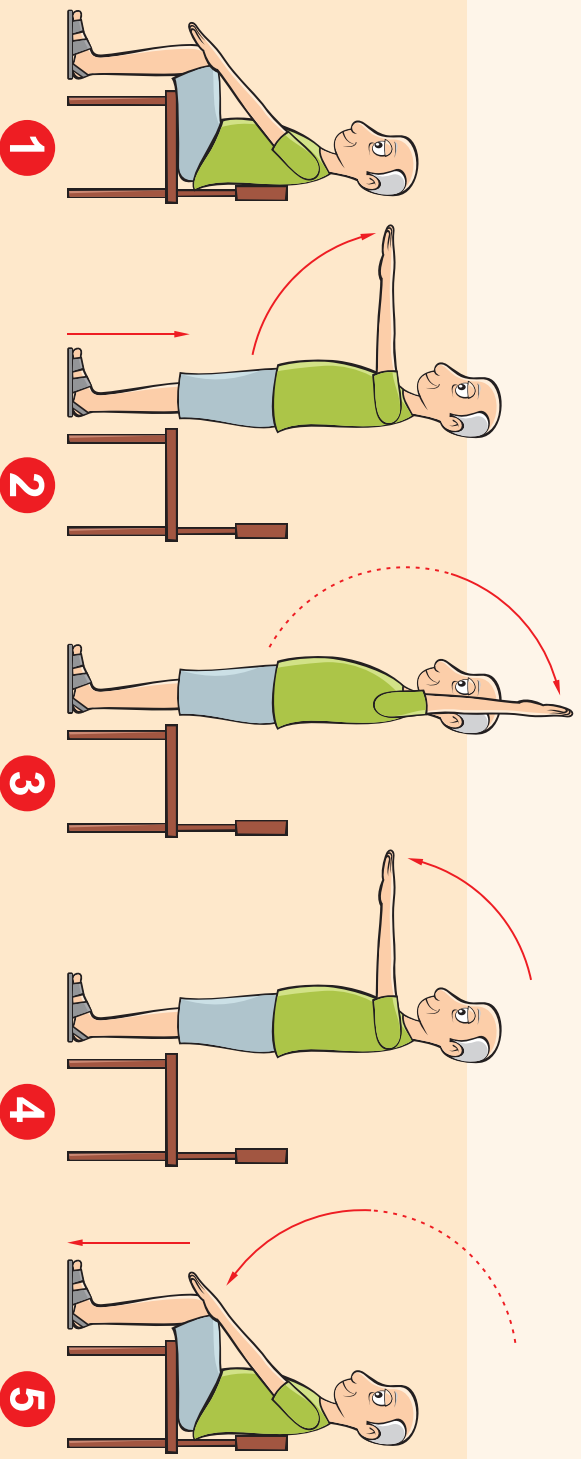
stretching, preparation and relaxation

stretching, preparation and relaxation



While sitting down and relaxing, circle your head very slowly in one direction, repeating this movement 20 times. Repeat the movement in the other direction.

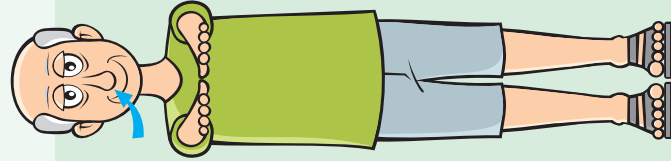
Start sitting down. You are going to get up from the chair, raising your arms as high as you can, and then sit down slowly, bringing your arms back to their initial position. Repeat 20 times.



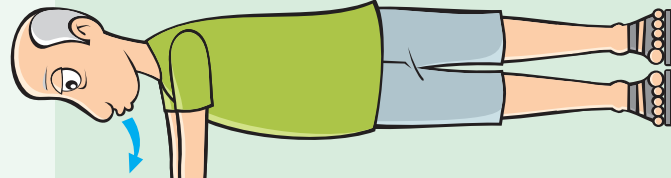
arm exercises

respiratory exercises

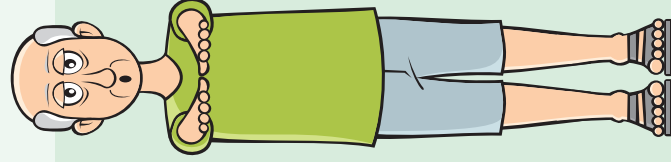
While standing up, put your arms out in front of you. Breathe in through your nose and breathe out slowly through your mouth, pursing your lips, while turning your whole body (without taking your feet off the ground) from one side to the other. Repeat 20 times.



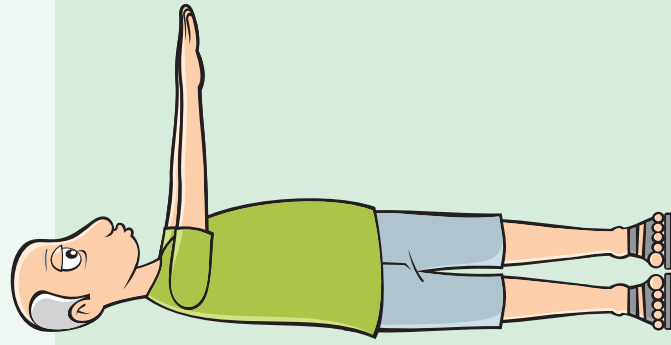
1



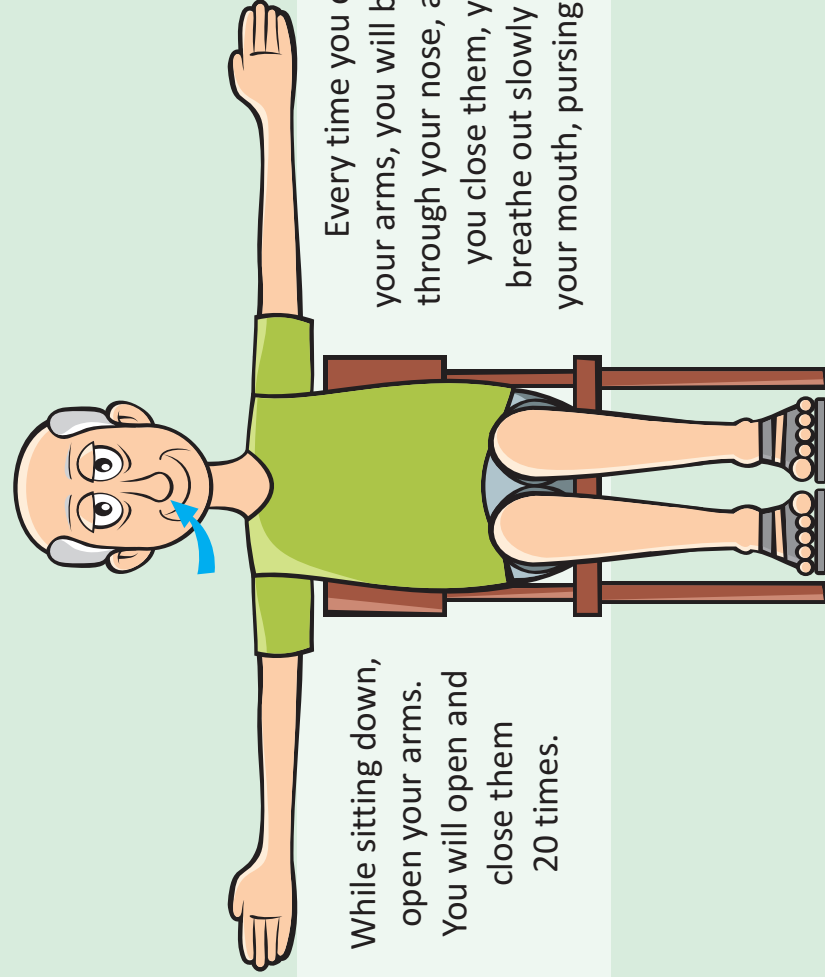
2



3



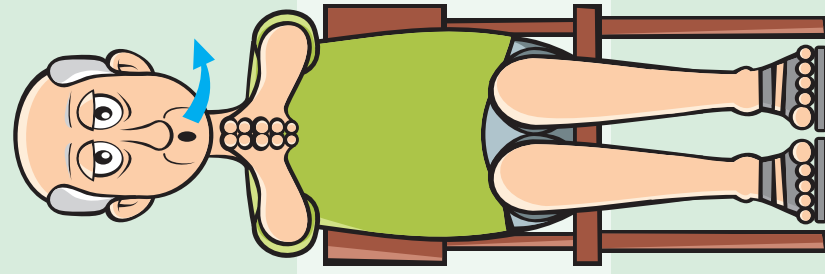
4



While sitting down,
open your arms.
You will open and
close them
20 times.

1

Every time you open
your arms, you will breathe in
through your nose, and when
you close them, you will
breathe out slowly through
your mouth, pursing your lips.

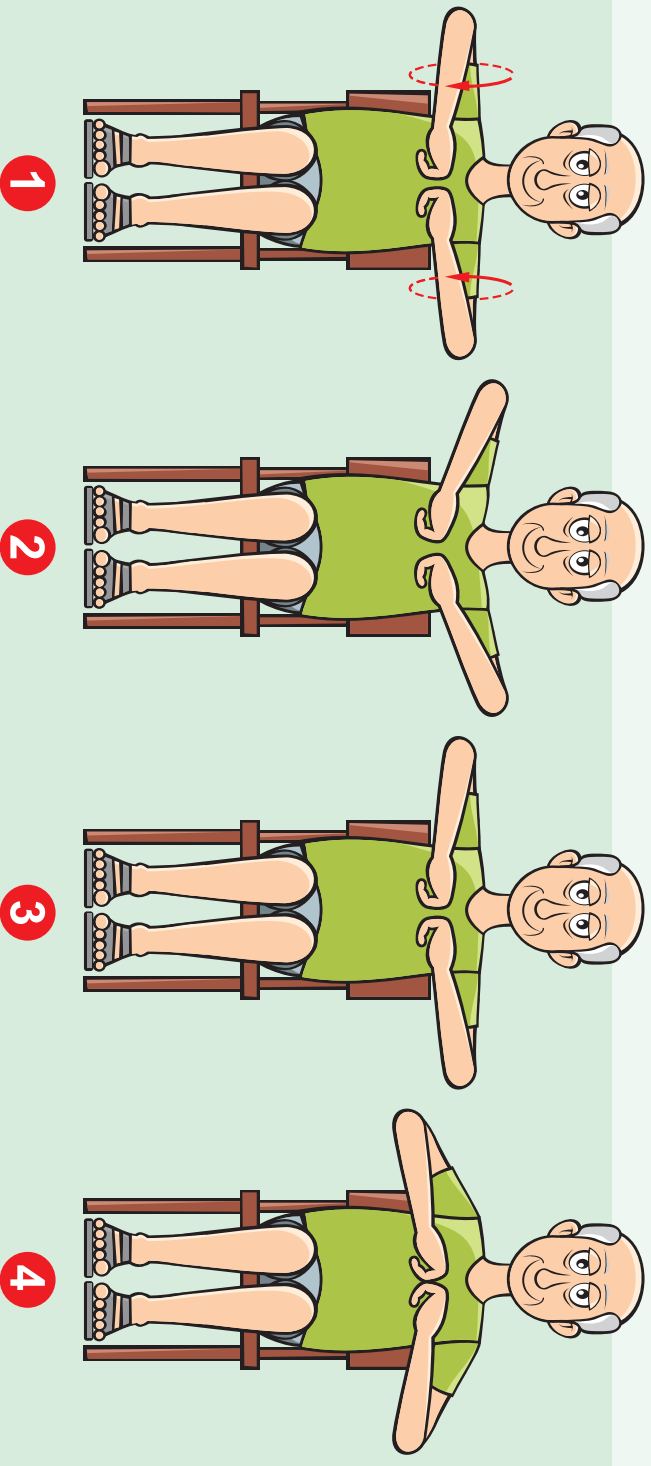


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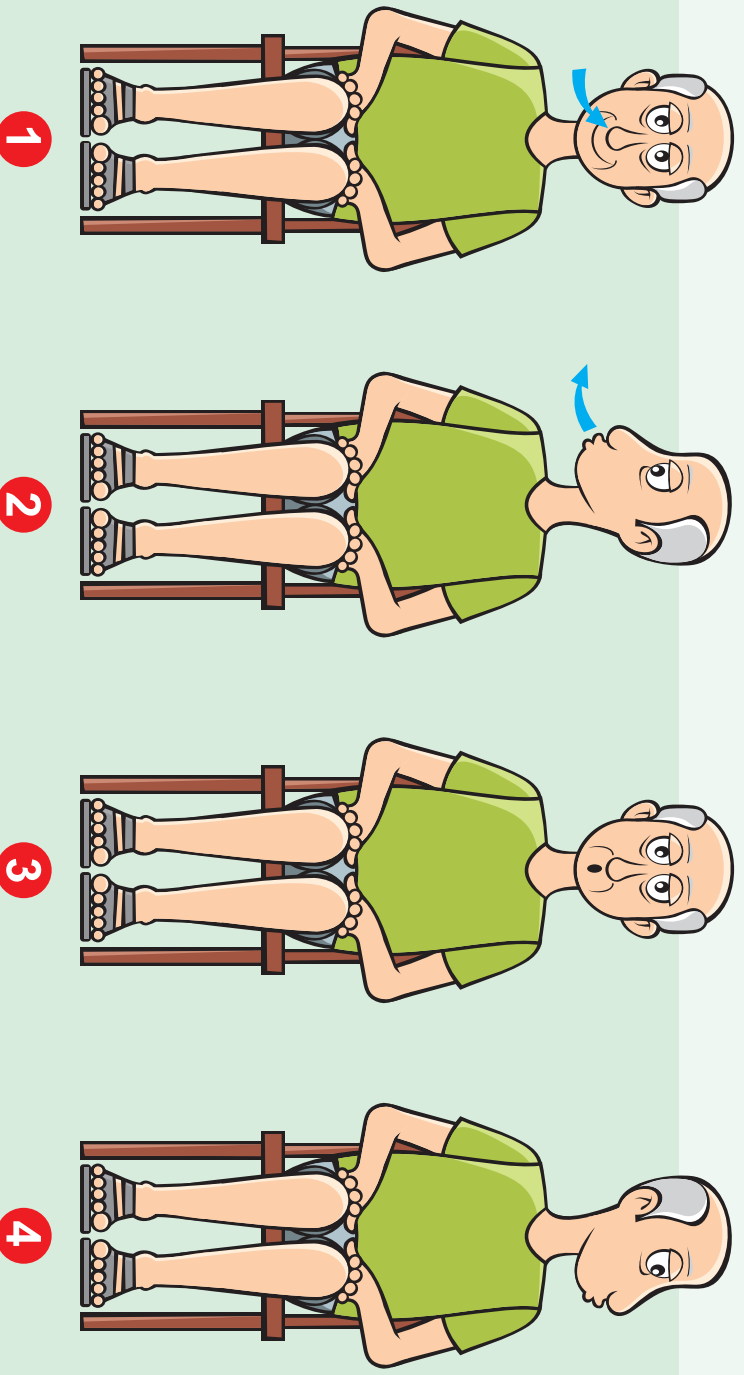
respiratory exercises

respiratory exercises

While sitting down with your thumbs resting above your chest, breathe in through your nose and breathe out slowly through your mouth, pursing your lips, while raising and lowering your elbows, as if you were "flapping". Repeat 20 times.



While sitting down, breathe in through your nose and breathe out slowly through your mouth, pursing your lips, while turning your head from one side to the other as if to say "No". Repeat 20 times.



respiratory exercises